



US005524195A

**United States Patent** [19]**Clanton, III et al.**[11] **Patent Number:** **5,524,195**[45] **Date of Patent:** **Jun. 4, 1996**[54] **GRAPHICAL USER INTERFACE FOR  
INTERACTIVE TELEVISION WITH AN  
ANIMATED AGENT**

## FOREIGN PATENT DOCUMENTS

9311639 11/1992 WIPO ..... H04N 7/16

## OTHER PUBLICATIONS

[75] Inventors: **Charles H. Clanton, III**, San Francisco, Calif.; **Emilie Young**, Boulder, Colo.; **Joseph M. Palrang**; **Marcel D. Janssens**, both of Sunnyvale, Calif.

Jeffrey J. Blatt, "A Primer on User Interface Software Patents", (The Computer Lawyer, vol. 9, No. 4, Apr. 1992). Hoarty, Multimedia on Cable Television Systems, Oct. 5, 1993, pp. 555-567. (IBM), Conferencing Metaphor, Feb. 2, 1993, pp. 63-66.

[73] Assignee: **Sun Microsystems, Inc.**, Mountain View, Calif.

Tanigawa, Personal Multimedia-Multipoint Teleconference System, Apr. 7, 1991, pp. 1127-1144.

[21] Appl. No.: **206,749***Primary Examiner*—Raymond J. Bayerl*Assistant Examiner*—John E. Breene*Attorney, Agent, or Firm*—Irell & Manella[22] Filed: **Mar. 4, 1994**[57] **ABSTRACT****Related U.S. Application Data**

[63] Continuation-in-part of Ser. No. 67,574, May 24, 1993.

[51] **Int. Cl.<sup>6</sup>** ..... **G06F 15/00**[52] **U.S. Cl.** ..... **395/155**; 395/161; 395/159;  
395/153; 395/154; 395/156; 395/152; 345/173;  
348/13; 348/7; 348/12[58] **Field of Search** ..... 395/152-153,  
395/161, 149; 345/117-120, 146, 902, 173-178,  
122; 348/6-7, 12-13; 434/110[56] **References Cited****U.S. PATENT DOCUMENTS**

4,706,121	10/1987	Young	348/6
4,712,191	12/1987	Penna	395/156
4,788,538	11/1988	Klein et al.	395/149 X
4,995,078	2/1991	Monslow et al.	348/6
5,021,976	6/1991	Wexelblat et al.	395/159
5,093,718	3/1992	Hoarty et al.	348/7
5,204,947	4/1993	Bernstein et al.	395/154 X
5,206,722	4/1993	Kwan	348/7
5,233,687	8/1993	Henderson, Jr. et al.	395/157
5,247,347	9/1993	Litteral et al.	348/7
5,357,276	10/1994	Banker et al.	348/7
5,361,091	11/1994	Hoarty et al.	348/7
5,388,993	2/1995	McKiel et al.	395/155 X
5,396,546	3/1995	Remillard	348/7

A graphical user interface for displaying and selecting video programs, such as video on demand, includes a video on demand server coupled to a communication medium. A plurality of settop box receivers are coupled to the communication medium for receiving digitized programming in the form of movies and the like from the video on demand server. The settop box includes a central processing unit (CPU) coupled to a memory and other electronic modules. The CPU generates and displays the graphical user interface on the subscriber's television. The graphical user interface is based upon a metaphor in which a world of spaces are organized as part of a studio back lot through which a user may navigate. The back lot includes a Poster wall which presents to the user a series of movie posters representing available selections. When a user touches a Poster on a touch sensitive screen of the television, the CPU generates an animation which displays the Poster coming off of the wall and appearing in the foreground of the screen. If a subscriber selects the Poster to view a feature presentation, the video on demand server downloads the selected video which is displayed on the television. The interface of the present invention further includes Extras which appear in animated form on the interface and move freely between spaces within the studio back lot metaphor. If a user selects an Extra, the Extra is transformed into a movie poster or advertisement. The user may then select the Poster and view the feature presentation.

**64 Claims, 22 Drawing Sheets**